

ED. MASSACHUSETTS PLOUGHMAN

NEW ENGLAND JOURNAL OF AGRICULTURE

VOL. LXI. - NO. 24

BOSTON, MASS., SATURDAY, MARCH 8 1902

WHOLE NO. 3137

MASSACHUSETTS PLOUGHMAN
NEW ENGLAND JOURNAL OF AGRICULTURE
Official Organ of the A. E. Agricultural Society.

MASSACHUSETTS PLOUGHMAN PUB. CO.

Publishers and Proprietors.

ISSUED WEEKLY AT

NO. 3 STATE STREET,
BOSTON, MASS.

TERMS:

\$2.00 per annum, in advance. **50c** if not paid in advance. Postage free. Single copies 5 cents.

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Correspondence from practical farmers, giving the results of their experience, is solicited. Letters should be signed with the writer's real name, in full, which will be printed or not, as the writer may desire.

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Entered as second-class mail matter.

Agricultural.

CIRCULATION OF THE SAP.

There has been much controversy about the manner in which the sap or moisture in the wood rises from the ground to the leaves and fruit of the tree, some claiming that the term circulation is incorrect, as the sap goes up and does not return. We believe that this is incorrect. The tree or plant, excepting during the season when it is dormant, if there is such a season, does have sap passing both upward and downward all of the time.

There has been ample evidence to show that in the exogenous plants, or those which make their growth by forming annual layers of wood around the trunk, the sap passes up through the albumen, or what is usually called the sap wood to distinguish it from the heart wood; it throws off much of its moisture through the leaves and bark as a sort of perspiration, and the leaves, acting as lungs for the tree, absorb certain properties from the atmosphere which changes the character of that which is left to pass downward again, as it does, through the inner bark to the ground. In this elaboration of the sap the sunlight plays no small part.

It is from the sap that is going downward that the cells which make the new wood are formed, and if accident or insects deprive the tree of its leaves, the tree makes no growth until they are renewed, and if the leaves are kept off long enough, the plant must die. This is equally true of the herbaceous plants as of the tree.

When the tree is girdled, it dies, not because the sap cannot go upward, but because it cannot go downward to the root again. It girdled in but a narrow strip, as some practice on grapes or other fruits, more of the sap is retained to make a better growth of fruit, until the space from which the bark has been removed has grown a new layer of bark. If it cannot bridge this space the tree or vine is killed as effectually as if cut off from the roots entirely.

To how great an extent the circulation of the sap may be influenced by the sunlight and the temperature of atmosphere and soil, it is hard to determine. It seems probable that when the air is warmer than the soil the evaporation is most rapid, and therefore there is a need for more moisture to be carried up. When the soil is warmer where the roots are than where the leaves are, but little moisture ascends, and the leaves change color and fall off, and the fruit falls. The only stumbling block to this theory is to be found in those trees which retain their leaves and fruit all winter, yet this is not insuperable, as they may have stored up in their wood, which is more porous or contains more cells than the hard woods, enough to furnish all they need during the winter.

The amount of water which a tree can carry up and evaporate through its leaves has been many times calculated and estimated, but we have not the figures at hand, and do not think them of enough importance to take the time to look them up. There are so many unknown or uncertain quantities in the problem that they are of little value. The number and size of the leaves, the rate of the growth of the trees, the temperature and humidity of the atmosphere, and the amount of water available in the soil, all influence the decision, and while careful experiments and close mathematical calculations may help one man to guess more correctly than another who has not given the best to the subject, it is but guessing at all.

We have seen a statement that a large elm transpired something over 150 tons of water in a season, but have not the exact figures. Any farmer who has one near his garden or cultivated fields knows that such a tree will reach a great distance with its roots to get all the moisture and fertility from its crops, and if there is one near a well or a drain pipe, if the smallest leak allows a drop of water to escape to tell where it can be found, the roots will break down the strongest wall or masonry we get at the main supply. And the elm is not the only one guilty of such practice.

We have said that a part of the returning sap goes down to the earth again from the tree, it does more than this. It carries with it certain of the secretions or excretions of the tree, waste material, which in many cases so poisons the soil as to make it unfit to grow the same plants of the same species upon. This cabbagelike is an instance of this soil poisoning well known to most farmers. Not only cannot cabbages be grown well upon a field two years in succession, without developing in the second year the club foot, or stomp foot disease, but all other plants of the Brassica family, as the canary, Brussels sprout, turnips, and it is

said some weeds not of that family, will be affected in the same way, if there is not a heavy application of lime made to disinfect the soil.

Another instance is that of a peach tree with the yellows. If the disease progresses very far before the tree is removed, another tree set in the same place will develop the same trouble, usually the first season, and a few shovelfuls of the earth in which it stood, put around a healthy tree a mile away, is enough to inoculate the tree. There may be chemicals to counteract this, or to disinfect the soil, but we are not yet assured of it. The Massachusetts Agricultural Colleges thought they had discovered such, but is more doubtful from recent experiments.

Farm Hints for March.

DRAINING LOW LANDS.

The weather as we write does not seem very favorable for doing any kind of farm work out of doors, but the month seldom sees the ground covered with snow all the time or even frozen. At least many of our readers will find the lighter, sandy soils and the well-drained soils fit to work before the month's end. The difference made by a good system of underdraining is never more plainly shown in a wet and cold spring, when the air and wind does not evaporate the rains or the moisture from a heavy clay soil. We say never more plainly, but it will show all the season, and most

the upper six inches of a clover field there were $3\frac{1}{2}$ tons of clover roots, containing about one hundred pounds of nitrogen and twenty to twenty-seven pounds of phosphoric acid. This not only enriches the soil, but as the roots decay they leave spaces for water to drain down from the surface to the subsoil, from which it is pumped up again by capillary attraction when the surface is warmer than the soil below.

EARLY CROPS.

There are some crops that can be put in the ground early, as they are not injured by frost or snow, or by the ground freezing after they have come up. Oats and peas are so much alike in this, that if we had

too many bushes in his pastures, and underbrush in his wood lots, should stand by those two varieties for a late pea.

Onions we have many times sown in March in the open ground, if we had land that we could fit properly, but there seems lately to be no great gain by getting them early, and when one follows the custom of growing celery between the rows of onions, or rather onions three to five rows between the rows of celery, the ground requires to be very well worked before the celery seed is sown. It is often the case that plants for the early celery are started under glass and transplanted, and many also practice this with onions now, claiming the labor of set-

ground can be plowed and harrowed, not included in those named above, are lettuce and spring spinach, early cabbages and flat turnips, while beets and carrots may follow soon after. The spinach and the dandelions sown last fall and summer will repay an application of nitrate of soda, at the rate of one hundred to 125 pounds per acre, not only increasing the crop, but giving it a brighter green, that makes it more attractive to the buyer. This should be put on as soon as the plants begin to start in the spring, and never when the plants are wet with dew or rain.

All the other crops also would be helped by a similar application of the nitrate if the soil is not already very rich. The small fruits in the garden need working round early in the spring, and a constant warfare kept up against weeds and insects. But it is the orchard that will be the principal battle ground in the war against insects. Canker worms, tent caterpillars, gypsy moth, brown-tail moth and currant worms were all so plenty last year, and neglected by so many, that we fear an unusual amount of trouble with them this year. To search the trees for eggs and nests, to cut off and burn the twigs on which they are, and to use poisonous sprays to destroy those that hatch out, seems to be the only methods that will ensure a good crop, although this is what is called the bearing year for most of our apple orchards. Directions for spraying have been so many times published that it should not be necessary to repeat them now, though many neglected to do this work last year because the crop of fruit was so light they feared it would not pay. But it did pay many who tried it, and they will find another profit this year in more vigorous trees and less insects to combat than in orchards where no spraying was done, and while spraying the use of the Bordeaux mixture to prevent blight and scab on apple and pear, and red rust of blackberry and raspberry bushes, and carbonate of copper on cherry and plum trees should never be omitted.

CARE OF FARM STOCK.

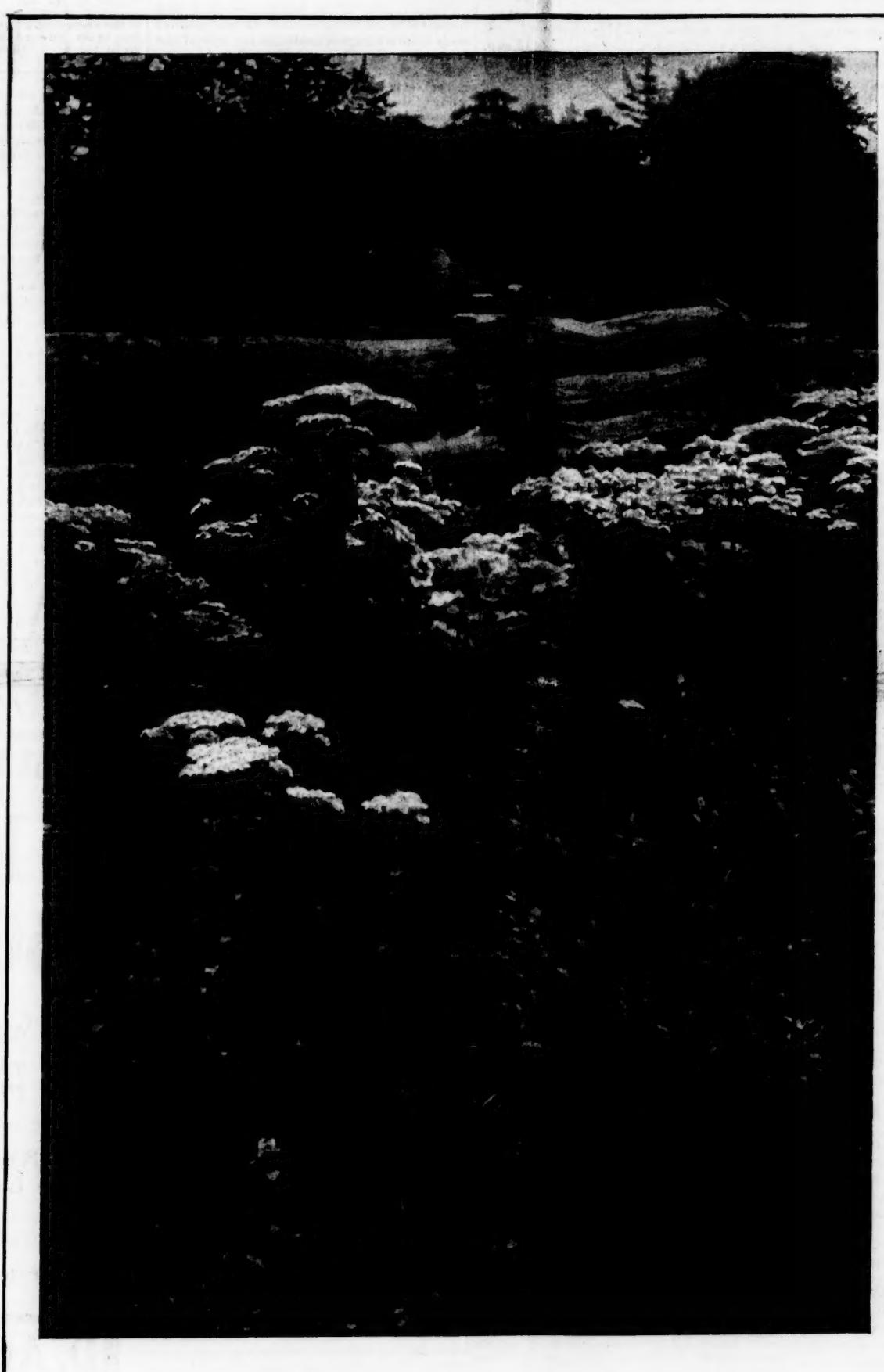
The directions for the care of farm stock need be no different from last month, excepting that the nearer they approach to bearing their young the better care they need. The best hay is not too good for the cows and ewes, and a few roots and light grain feed of bran, oats or oatmeal should give them strength without so heating the system as to create a tendency to milk fever or garget. When we have fed in this way we never found it necessary to give physic, as many writers advise for cows a week before calving. That we look upon as a relic of the days when the cows, fed only the poorest of dry, over-cured hay, were so constipated that they needed physic. Remember that March winds and thaws, and cold storms are more trying to the system than the colder days of February, and protect all animals from them as much as possible.

THE POULTRY YARD.

If we judge by the price of eggs in the market, and the complaints we hear of hens not laying, there will be few hens that will be broody this month, but when the ground is bare of snow again, so that they can get out, a little extra care will start them at laying, and we will have eggs more abundant in April. And we do not think chickens from eggs set in March are any better than those set a month later, when eggs cost less, hatch better, and the chickens grow more rapidly. By a little extra feeding, and never forgetting the beef scraps, we have had little trouble in getting Plymouth Rocks to lay at about five months old, and Brahmans soon after they were six months old, that is, a part of the flock. Some of them will always mature more slowly than others, under the same care, probably because of the difference in the hens that laid the eggs.

It is said to be a good business policy to have something to sell when other people have but a short supply or none, and consequently prices are high. This is the main idea in winter dairying. But few send butter to market when the prices are the highest. The objectors to this plan say that it costs more to feed cows in winter at the barn than in the summer at pasture, which is true enough, but as for several years we sold milk, and had, barring accidents, to deliver about the same number of gallons a day at the village at one season as another, we were never able to see that it cost us more, and sometimes thought it cost less to keep a cow a year if her calf was dropped in the fall than when she came fresh in the spring. After a few trials we became convinced that if we wanted to raise a calf from one of the best cows, we had better success with the fall calf than the spring calf. When the time came to turn it into the pasture, it was as ready to get its living on grass or green fodder as the one that was six months older, and the fall calf at two years old was not behind the one of $2\frac{1}{2}$ years old, in growth or maturity. Of course, when selling milk the main point with us was that we could get seven cents a quart in winter as easily as five cents in summer, but while butter making we had a yearly contract at fifty cents a pound, and even then we found that cost and trouble of cooling cream and icing butter for transportation in summer was not far from making summer butter cost about two cents a pound more than the winter butter.

Pedigree without merit cuts but a sorry figure nowadays among progressive breeders of trotting stock. A full brother of Dare Devil (2.00) is standing for service at Village Farm at \$15 to warrant. They say that Prince Henry, although an expert seaman, is something of a horseman, and can navigate an American trotter with considerable skill. If report is correct he owns two trotters that were bred and raised in this country.



THE YELLOW MONTH. FROM "THE OLD FARM," BY RUDOLF EICKEMEYER, JR.

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We expressed at the beginning a doubt if there is any really dormant season for the circulation of the sap, or one of long continuation. We think there is not a month in the winter that it cannot be seen that the buds on our fruit trees are making some growth, though of course it is not rapid, and they could scarcely do that if no sap came to them from the cellular formations in the wood if not from the soil.

Bear in mind that the ascending sap does not go up through the centre or heart of the tree, as has been asserted. If it did the hollow trees with a cavity into which a man or bear can crawl could not live long. But it goes up through the more porous sap wood next to the inner bark or through the layer of new wood made last year, returning through the inner bark which is forming another new layer this year.

But we think we have said enough to prove that there is a movement of the sap both upward and downward through the trees, and that both are near the outer bark. Maple sugar makers say there is no gain by inserting a spout more than three inches into the tree, and perhaps less would be sufficient if the spout was held firmly at a less distance. They also should know whether the best run of sap is when the soil being warmer than the air and the sap is running downward, or if the reverse is true. If they do not, let them test the matter this year.

especially if the owner is in a little too much haste, and plows his land before it is quite ready. He can turn it over but it does not pulverize so that the roots and the warmth can penetrate it, nor do the chemical changes take place that help to render the mineral elements available for plant food. Any one who has such cold, wet land should make arrangements to drain it before another winter, or put it into a permanent grass crop, and then utilize the hay for increasing the amount of stock kept. When the soil is made too soiled can be enriched. Though they have not the natural fertility of the lowlands, they will often prove most productive, yielding good crops when manure or fertilizer is applied, because they may be worked earlier in the spring, and because, being more porous, they absorb moisture and put it where the roots can find it. But there is one way of draining, subsoiling and making the wet fields more porous and friable, to which not attention enough has been given in New England. We refer to the growing of clover on them, not to be plowed under as a green manure, but to have one or two good crops of clover hay taken from them, and then to be plowed and reseeded. The tap roots of the clover strike down into the subsoil, and the late Joseph Harris, in his talk on manures, said that, when the clover was cut, that within

decided where we desired to grow them, we were only influenced by the conditions of the fields in deciding which to put in first. The soil is better for a day or two of drying out before the harrowing. As we sowed oats only to cut green for hay, and as a nurse crop for clover, we did not care to use the three bushels per acre which used to be the rule when we were young, but thought two bushels a large plenty. Then when the oats were cut, the soil was not so dry nor the plants so shaded as to have the young clover burn out as soon as the oats were

decided the onion plants to be less than that usually required for the first hoeing and weeding. Though onions, like most other vegetables, have brought good prices this year, we are not sure that they cannot in an ordinary season be grown so much more cheaply in the West that the farmer located near an Eastern market cannot find more profitable crops for his field and garden.

Early potatoe proved an exceedingly poor crop for the few who had them last year, probably owing to the failure of Southern crops, and the fact that the spring rains prevented many from planting as early as usual in New England, Long Island and New Jersey, those two points being near an Eastern market and the fall calf at the village for his field and garden.

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GARDEN AND ORCHARD WORK.

An early garden to supply the family is of great importance. Among the crops that may be planted or transplanted from the hotbeds almost as soon as the

Agricultural.

The Elm Leaf Beetle.

Last summer the elm leaf beetle was very plenty, and much damage was done by it in this State. Prof. H. T. Fernald of the division of entomology at the Massachusetts Agricultural College sent out a bulletin last July, telling its history, habits and how to control them, but it was issued too late to be of much benefit last year, and we will republish the substance of it now, that our readers may be ready to fight them in season this year.

The insect, like many of our other insect pests, is a native of southern Europe, and is thought to have reached this country at Baltimore in 1883, and has spread slowly, not being found at Amherst before 1885. It was identified in Middlesex County by us about the same time, and, perhaps, a year or two earlier, our opinion being confirmed by the director of the gypsy moth commission. Last year it was abundant in all parts of this State and those south of us.

The adult beetle lives through the winter in buildings when possible to conceal themselves, preferring them to cracks in the fences or places under the bark of trees. The beetle when full grown is a little more than a quarter of an inch long, greenish or reddish yellow in color, two black eyes with a black spot between them, three black spots on the thorax, and a broad black stripe along the back on each side, and a narrow black line along the middle of the back where the wing covers meet, and the yellowish color showing between them. Thus it will be seen at first glance to look not unlike the striped cucumber beetle.

The beetles leave their hiding-places about the time the elm leaves open, and after maturing they feed upon the leaves, making irregularly shaped holes. They begin laying when the leaves are full grown, and each female may produce from four hundred to six hundred eggs. These are not produced all at one time, but in clusters of from five to twenty-six in number, with intervals between the periods, so that they are often hatching for some weeks, and the larva may be found nearly fully grown on the trees at the same time as the unhatched eggs. The eggs are oval and yellow, set on the under side of the leaves, usually in two rows and pointed end outward.

The eggs hatch in less than a week from the time they are laid, and the larva begin at once to feed on the under side of the leaf, leaving the upper surface and veins untouched. They are fifteen to twenty days in getting full growth, and then are about one-third of an inch long, with black heads and yellowish body, with black stripe along each side. Then they crawl down the tree or drop from the branches, seeking places in which to change to the pupa form. It takes about ten days for the next transformation, to the adult form again. This second brood is said to furnish the adults that will remain over winter, but we think that in some seasons they also lay eggs in the fall, and a third brood may be hatched, if the warm weather continues until late in the fall, as last year.

While this is not as much of a pest as the gypsy moth, or the brown-tail moth, if they are allowed to eat the leaves from the trees three seasons in succession, it will greatly injure them, if not kill them. They seldom deposit eggs or feed on other plants beside the elm, and prefer the English elm to the American elm.

The best way to check their attacks is to spray them, first when the leaves are partly grown, to destroy the beetles that are feeding on the leaves before they have laid their eggs. This will kill many of them. After the eggs hatch, a second spraying may be needed to destroy the larvae, and this needs to be put on that the poison will be on the under side of the leaf. The Paris green or arsenate of lead formula may be used, the latter being preferable, as not burning the leaves at any strength if properly prepared. When the larvae are on the trunk of the tree or on the ground, they may be killed by spraying with kerosene emulsion or a mixture of kerosene and water.

The arsenate of lead is made by mixing four ounces of arsenate of soda and one ounce of acetate of lead in one hundred gallons of water. This is safe, effectual and not expensive. The Paris green mixture is made by slacking two pounds of quick lime in a few gallons of water, gradually adding one pound of Paris green, and when well mixed let it stand until well dissolved, then add more water to make one hundred gallons. The kerosene emulsion is made by shaving a half-pound of hard soap fine, and dissolve in one gallon of boiling water. Remove from the fire, put in two gallons of kerosene oil, and with spray pump churn it until it becomes a soft butter-like emulsion. This may be kept on hand and mixed with water as needed. The above amount would be enough for about fifteen gallons of water, soft water preferred. If a mixture of kerosene and water is used, the pump should be such as to keep the two well mixed. About one gallon of kerosene to three gallons of water is the proper amount for elm-leaf beetle.

SUMMARY.

1. Spray the tree with arsenate of lead or paris green when the leaves are about half grown in spring.

2. Repeat this treatment soon after the eggs hatch,—usually about the first week in June, but varying with the season and locality.

3. Remove all loose bark on the trunk and main limbs of the tree, that the grubs may find no place to pupate in, and so go to the base of the tree.

4. Destroy the grubs and pupae at the base of the tree with boiling water, kerosene emulsion or the kerosene and water mixture, and repeat after five days if necessary.

5. Destroy all beetles found in hiding during the winter.

Butter Market.

The butter market has weakened a little, although not as much in Boston as at other points, perhaps because it did not go as high here as in New York and Western markets. The best fresh-made creamery is selling at 29 cents, or dealers are asking that price for it, but they do not refuse 28 to 28½ cents for anything but special marks.

Even at this buyers are not eager to take supplies, and if they can get good firsts at 26 to 27 cents, or fresh-made renovated at 22 to 23 cents, their customers have to accept it. Perhaps they have to pay as much as for fresh creamery, but that is between dealer and consumer. There is June extra from cold storage at 23 to 24 cents, and fair to good at 19 to 22 cents. Extra dairy is 24 to 25 cents, firsts at 22 to 23 cents, and seconds 18 to 20 cents. Western imitation creamery extra at 17 cents, and firsts at 14 to 16 cents, with ladies at 13 to 15 cents. Boxes and prints are in fair demand at 29 to 29½ cents for extra Northern creamery, 25 to 26 cents for extra dairy, and common to good 18 to 22

cents. Jobbers want one or two cents more than quoted prices. Very little of best grades is taken for export at present rates.

The receipts of butter at Boston for the week ending Feb. 21 were 10,826 tubs and 22,350 boxes, a total weight of 582,907 pounds, including 74,750 pounds in transit for export, and with the latter deducted the net total was 508,157 pounds, against 554,819 pounds the previous week, and 706,527 pounds for corresponding week last year.

The exports of butter from Boston for the week were 88,498 pounds, against 86,095 pounds the corresponding week last year. From New York the exports for the week were 3,066 packages.

The Quincy Market Cold Storage Company reports a stock of 38,268 tubs, against 26,575 tubs last year. The Eastern Company's stock is 5,200, against 4,500 tubs, and with these added the total stock amounts to 43,468 tubs, against 31,465 tubs a year ago, an increase for this year of only 12,003 tubs. The reduction of stock last week was 762 tubs.

Boston Retail Markets.

There are quite liberal offerings of Western quail, the cost being about \$4 per dozen. Some French quail available are \$3.50 to \$4 per dozen. Western grouse or prairie chickens are in fair supply, and cost high at \$2.75 to \$3 per pair.

For imported game birds, Swiss mountain grouse are \$2 each, with Scotch grouse at \$2 per pair. Some English black cock are costing \$2.50 per pair, with French partridges at \$1.75 per pair. Golden plover from the West are \$6 per dozen, with Southern rice birds at \$1.25 per dozen.

Nice fat squabs are \$4 to \$4.20 per dozen, with offerings moderate. For stall-fed pigeons the cost is \$2 to \$2.25 per dozen, with the range down to \$1.50 to \$1.75 per dozen. Suckling pigs are in moderate supply, with the cost at \$2 to \$3 each, as to size, with quarter pigs costing 13 to 15 cents per pound.

Turkey supplies are liberal for the season, but cheap stock has become worked off from the market. The cost of fat young hen turkey is 25 cents per pound, while the general range is down to 20 cents per pound. Few birds being obtainable below the latter price. Some wild turkeys are about 25 cents per pound.

Fat geese are about 18 cents per pound, while the cost of ducklings is 18 to 20 cents per pound. For roasting chickens the cost of best Philadelphia milk fatted birds is 25 cents per pound, with the range down to 18 to 20 cents for other stock. Fat fowls are about 16 to 20 cents per pound.

For fresh Spanish mackerel from the South, the cost is 30 cents per pound, with Florida sheepshead costing 20 cents per pound.

Oyster crabs are unchanged in price, the cost being \$2 per quart, with shrimp costing 40 cents per quart. Florida panopoles hold at 30 cents per pound, with red snapper from the same waters costing 20 cents per pound.

Fresh native smelts are available at 35 cents per pound, while the cost of medium smelts is 25 cents per pound. The cost of Columbia River salmon is 35 cents per pound, with smoked salmon costing 30 cents per pound. Whitefish from the Great Lakes is 20 cents per pound, while some whitefish is held at 30 cents per pound. The cost of turbot is 15 cents per pound, with salt rendering 50 cents per dozen.

Mushrooms are unchanged in price, the range being \$1 to \$1.50 per pound, with oyster plants at 10 to 15 cents per bunch, and hothouse cucumbers costing 15 to 25 cents each as to size.

For cabages the cost is 10 to 20 cents per head, with Cuban onions at 10 cents per pound.

Native onions the cost is 8 cents per quart, with Spanish onions at 6 pounds for 25 cents.

The butter market holds firm in price, with moderate offerings of best fresh goods.

The cost of best freshly made creamery cut from tub is 33 cents per pound, with the range down to 28 to 30 cents per pound.

Breeding chickens are \$1.10 to \$1.25 per pair for best incubator raised birds, with Western at 25 to 30 cents per pound.

For fresh Spanish mackerel from the South, the cost is 30 cents per pound, with Florida sheepshead costing 20 cents per pound.

Oysters are unchanged in price, the cost being \$2 per quart, with shrimp costing 40 cents per quart.

For fresh salmon the cost is 35 cents per pound, with smoked salmon costing 30 cents per pound.

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The cost of turbot is 15 cents per pound, with salt rendering 50 cents per dozen.

The butter market holds firm in price, with moderate offerings of best fresh goods.

The cost of best freshly made creamery cut from tub is 33 cents per pound, with the range down to 28 to 30 cents per pound.

Breeding chickens are \$1.10 to \$1.25 per pair for best incubator raised birds, with Western at 25 to 30 cents per pound.

For fresh Spanish mackerel from the South, the cost is 30 cents per pound, with Florida sheepshead costing 20 cents per pound.

Oysters are unchanged in price, the cost being \$2 per quart, with shrimp costing 40 cents per quart.

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Poultry.**Turkeys and Apples.**

you know that the great American food for the turkey, is a comparatively recent one to the festive board of our Englishmen! Ten years ago, according to an English officer on one of the large steamers supplying between Liverpool and Boston, the dinners in England were a rarity, except among the wealthier class of people. They classed them among the fancy birds, treated them with the care given to the pets of the feathered world, and reaped the harvests when they disposed of them to the doo-boppers. People of the same type as the Americans "longshoremen" were equally unfamiliar with them.

As a resident of Ingersoll, Province of Ontario, had a vision that in the turkey was a title which, if it could be introduced in England, would yield profitable results. It was a daring, hazardous vision, with the idea in mind he visited a number of poultry raisers in the Canadian Northland, and made contracts with them to furnish him with so many turkeys at a certain time of year. A few weeks before Christmas they were carefully packed in cold storage, unplucked, and shipped to England, where they were put in the market and had a ready sale, although the price was then so high as to make it impossible for others than the well-to-do to buy them. Nothing could have pleased the people more. The tender, clean-looking and palatable bird to them seemed far superior to beef or veal, and the plump, white-meat bird was far more appealing than the bony, bony breast of the pheasant. Therefore demands for the same article came from thousands who had tasted of the delicious meat. Like Oliver Twist, they wanted more.

As may be expected, the successful Canadian exporter was not slow to enlarge upon his ideas. Returning to the Northwest, he started almost immediately on making his contracts for the next Christmas season. His method of business was original. Approaching the proprietor of the farm, he said for example:

"How are you, Mr. —? I've come around after more turkeys. How many can you give me this year?"

"Well, I guess I can feed you up as many as I did last year," was the reply.

"That won't do; I've got to have more turkeys this year, and unless you can give them to me I'll have to look farther."

To this there could be only one outcome, and the farmer promised to increase the number of his turkey offering. In this way the operator traveled from place to place, for it took a large number of farms to supply his needs. To insure good plump turkeys he managed to impress upon the poultry raiser the fact that the last lot was found to be much below the standard upon its arrival at Liverpool or London; and of course this would have to be remedied or trade cut off. Doing little else it takes eleven out of every twelve months' time to prepare for the turkey exportations, and this last Christmas the number exported had increased to fifty thousand.

In Boston, the man, woman or child must be poor and friendless, indeed, who does not get a piece of turkey either at Christmas or Thanksgiving, with the Salvation Army and scores of smaller societies so generous and helpful; while for people of moderate or small incomes the flesh of the turkey is often found as cheap as that of other meats. But in England even at this late day the longshoremen and others of his class find the turkey an expensive luxury. That many of them do manage to enjoy an "American Christmas dinner" is due to a scheme which is as unique as it is beneficial. As told by the ship's officer mentioned above it is as follows:

"Perhaps you know that in England there are few shops in which meats and vegetables are both kept. One dealer devotes his entire business to meats of one certain kind; another sells nothing but vegetables and game, and a third deals entirely in candy, etc. That a longshoreman earning perhaps \$9 or \$10 a week when he finds something to do every day, but usually lacking one or two days' pay, should be expected to pay out \$3 or \$4 in a lump sum for turkey, vegetables, candy and other Christmas foodstuffs, is out of the question; and no one knows this better than the poor people themselves. Still they crave some of the good things of higher living, and finally the idea of forming societies for the purchase of various articles came into vogue.

"For instance, a 'turkey society' springs into existence perhaps twelve weeks before Christmas. At its head is the proprietor of a shop dealing in fowl, and associated with him are some twelve—more or less—people who are anxious to have a turkey dinner at the Yuletide. Each one pledges himself to buy one bird, and forthwith pays into the treasury, usually one shilling. Thereafter once a week until the bird is delivered, another shilling is contributed, and at the proper time each one is presented with his or her turkey. The loss of a shilling a week has not been felt seriously by thin pocketbooks, and the dinner more than makes up for the outlay. In exactly the same way, except as to the time and amount of money invested, candy, vegetables, meat and similar societies are formed."

Boston thus far has been favored by the Canadian exporter as a port for shipment. His main idea always is to secure accommodations best suited to the nature of the cargo, which must include good cold-storage facilities.

The growth of the turkey exports has been somewhat like that of apples: Twenty years or so ago American apples in England were practically unknown. The product from the home orchard was kept as a choice fruit, seldom eaten in any other than a natural state. The time came, however, when an American conceived the idea of sending to England some of the surplus in this country.

In order to boom the staple rather as a choice food article than that of a choice fruit, an expert in the preparation of apple pie, tarts, pies, turnovers and the many such forms also went to England from this country. The sale was encouraging, and he liked the different dishes—if they be called such—prepared by the chef, and a ready market was opened for the disposal of apples from this country. But the sellers have not always met with success, as told by one well-known local steamship agent.

It was only a few years ago that he attempted to send 10,000 barrels in one shipment to Liverpool. He consulted with one or two dealers in the matter and they declared that if he did so the market would be flooded and prices would slump. Despite their warnings he sent the 10,000 barrels, and no sooner had they been landed on foreign shores than the market fell off one shilling which cut off all profits. To this agent the slump meant only one thing: that apples had not yet become well enough

known to allow the shipment of such quantities at one time. That was obvious, but it did not discourage him.

Last year this same agent arranged to send 30,000 barrels in one shipment, in the face of his previous failure. He cautioned all who knew the nature of the cargo to say nothing about the number of barrels or aught else that would lead outsiders to suspect what was being done. At the last moment he let a dealer into the secret and the latter threw up his hands in astonishment.

"Man, what are you thinking of!" he ejaculated. "The market will drop all to pieces."

"Oh, no, it won't," responded the agent. "I have thought this matter over carefully and fully realize the risks I am taking; I haven't the slightest doubt that not only will the market hold firm, but if there is any change it will rise."

"I have a box of cigars which says it will stump," said the other, and the bet was accepted.

The steamer sailed and in due time arrived at her Liverpool destination. The steamship agent gave plenty of time for the landing of the apples and the effect which they would have on the market, and then he telephoned to his friend, who receives foreign quotations from the market.

"Well, what have you to say about apples?" he asked.

"I owe you a box of cigars," came back the answer. "The market went up one shilling."

When asked how he dared this experiment, the agent said: "Why, I believed that the tastes of the English public had become educated to the apple; I knew that there was a heavy demand for it, and that I sent over 20,000 barrels of the very best product, the shiny, rosy-cheeked variety, everybody would grab at it. My predictions were 'made good,' and the bidding which took place for that lot was spirited almost beyond belief."

Since 1886 the number of barrels of apples which have been exported from Boston is 4,205,243 exclusive of the present year, which has been a decidedly poor one for the crop in America. A large part of these came from the orchards of a New Englander who moved from this section of the country to the West some years ago. He secured lands in the vicinity of Kansas City, and instead of growing grain, as practically all of his neighbors were doing, he utilized every bit of available ground for apple trees. He was laughed at and often asked why he did not grow grain, but he only remarked that while his fellow-men were watching their crops with the greatest care, and stood on the brink of populism and total loss at all times, he had practically nothing to do but watch the trees grow and the crops come, helping, of course, by applying the artificial stimulus which aids the growth. The best varieties of grapes were said to be the Concord for black, the Niagara for white, and the Brighton for red. The rust or cloudiness on the Kieffer pear is worse on a damp soil than on a dry, sandy soil, and may be due to an oversupply of moisture, or to the action of frost in the early spring. The English walnut should be transplanted only in the spring as the root is very soft and tender. It has been successfully grafted on the black walnut in Burlington County, N. J., by grafting, as the apple trees are grafted. [If so, we think they could also be grafted on the butternut, but we should be less confident of results on the hickory.—Ed.] Twenty-five bushels of stone or unsalted lime to the acre has been found a remedy for club foot in turnips and cabbages. The Garber pear or any of the oriental pears are good to pollinate the Kieffer. One speaker thought it a mistake to graft sour apples on the wood of sweet apple tree, as the saps do not mix properly.



ROSE COMB BROWN LEGHORN COCK.
Owned by C. S. Valentine.

in the row, gives 2420 dozen roots to the acre, and at twenty-five cents a dozen would bring \$605. A man in New Hampshire grew \$100 worth of celery upon a plot six by sixty feet, or at the rate of \$1400 an acre, and this may have been the second crop on same land. He also grew two crops of out-door lettuce on another plot of same size that brought \$105 or the rate of \$185 per acre. This meant one plant to the square foot, worth about two cents a head. His market was the retail grocery store in Laconia, N. H., which does not pay fancy prices. He was not a farmer, but had a garden on a city lot. Many farmers still say, and believe, too, that "it does not pay to bother with such trash," and they do not have them to sell or to use on the family table.

At a meeting of the New Jersey State Horticultural Society, the following points were brought out in answer to questions from the audience. The Wealthy apple is a heavy bearer, good keeper and good for cooking, but the tree is easily killed by spraying with oil. The best varieties of grapes were said to be the Concord for black, the Niagara for white, and the Brighton for red. The rust or cloudiness on the Kieffer pear is worse on a damp soil than on a dry, sandy soil, and may be due to an oversupply of moisture, or to the action of frost in the early spring. The English walnut should be transplanted only in the spring as the root is very soft and tender. It has been successfully grafted on the black walnut in Burlington County, N. J., by grafting, as the apple trees are grafted. [If so, we think they could also be grafted on the butternut, but we should be less confident of results on the hickory.—Ed.] Twenty-five bushels of stone or unsalted lime to the acre has been found a remedy for club foot in turnips and cabbages. The Garber pear or any of the oriental pears are good to pollinate the Kieffer. One speaker thought it a mistake to graft sour apples on the wood of sweet apple tree, as the saps do not mix properly.

Vegetables in Boston Market.

The receipts of poultry have been larger the past week, and while prices on Northern and Eastern fresh killed have not changed much, it is easier to buy than to sell at last week's rates. Choice roasting chickens are nominally 18 to 20 cents and broilers 20 to 25 cents, but must be extra to bring top prices. Fair to good chickens sell at 12 to 15 cents; some choice fowl might bring 14 cents, but most lots sell at 12 to 13 cents. Pigeons are \$1.50 a dozen for choice and 75 cents to \$1.25 for fair to good. Some choice large squabs sell at \$2.50 to \$3 a dozen, but those at \$1.50 to \$2.25 are more often to be found.

Game is dull. Good ducks sell at last week's rates, but the most of receipts are thin, and will not bring quotations. Canaries have the wide range, from \$2.50 a pair for prime down to 50 cents for poor. Black duck, teal, wood duck, squirrel and rabbit out of season March 1, and dealers would close out at last week's prices or less. Venison and moose in cold storage, but prices unchanged.

Botanical.**Orchard and Garden.**

A Michigan peach grower says that if it were not for the yellows, peaches would be cheaper than potatoes. He digs out the affected trees as soon as noticed, and sets others in their places, which are soon as large as those among which they are put. We have not thought it well to replace any fruit trees in the places where others have died of disease, although some of the experiments at the Experiment Stations have indicated that a liberal application of the muriate of potash and ground bone or acid phosphate would put the land in such condition that the disease would not affect trees set there, and we believe that at the Massachusetts Station some years ago they thought that this used when the tree was first seen to have the disease would check its progress, if the affected limbs were cut off. We doubt this, and we think they have not advocated this idea recently.

In the well-known peach-growing section of Niagara County, New York, it is the most usual custom to allow the peach tree to commence to branch at two feet from the ground, and by heading it keep it so low that most of the fruit can be picked by a man standing on the ground. This makes it necessary to set a little farther apart than the usual fourteen to fifteen feet, or perhaps to twenty-five feet, as they spread more when allowed to grow higher, and also a yearly cutting back each year of from one-half to two-thirds the new growth may render it less liable to be winter killed, and where the trees may be expected to live long the greater distance apart may prove to give the best results. Nurseriesmen are saying that the peach tree is becoming more popular than any other, even the Japanese or Burmese plums now being in less demand, and that orders for 100,000 or 150,000 trees to single buyers are not uncommon this season.

The Springfield Republican tells of some of the possibilities of garden crops. A man in New Hampshire realized \$285 on an acre of currants the fourth year after setting. Set four by five feet apart it takes 2178 bushes to the acre. A man in Ohio raised 7000 quarts of strawberries to the acre. The Netted Gem muskmelons planted five by six feet apart give 1425 hills to the acre, and under good culture will yield ten or more melons to the hill. Sweet corn at nine inches apart in rows three feet apart gives 19,360 stalks to the acre, and one ear to the stalk in 1613 dozen, \$129 per acre at eight cents a dozen. Celery at 30 cents a head, \$4.25 to \$4.50.

Domestic and Foreign Fruit.

Apples are in a little over supply, as some that were intended for export were not taken. Receipts were 3344 barrels, and exports only 300 barrels. Corresponding week last year receipts were 6082 barrels, and exports were 2663 barrels. At quotations the supply proved too large for the demand, and prices have weakened. Spy and No. 1 Maine Baldwin sell at \$4 to \$5, Gano \$4.25, No. 1 Greening \$3.75 to \$4.25, Western Bon Davis \$3.50 to \$4.25, Baldwin and Greening common \$3.25 to \$3.75, Talman Sweet \$2.50 to \$3.50, mixed varieties \$3 to \$4 and No. 2 \$2.50 to \$3.25. Cranberries in light supply, Cape Cod fancy late \$7 to \$8, choice sound \$5.50 to \$6.50, common to good \$4 to \$5. crates \$2 to \$2.50, Jersey \$1.75 a box. Florida strawberries in light supply and refrigerated lots selling at 40 cents a quart or the best, but fair to good at 30 to 35 cents a dozen. Celery at 30 cents a head, \$4.25 to \$4.50.

Export Apple Trade.

The total apple shipments to European ports during the week ending Feb. 22, 1902, were 28,663 barrels, including 300 barrels from Boston, 3659 barrels from New York, 5349 barrels from Portland, 18,830 barrels from Halifax and 525 barrels from St. John, N. B. The total shipments included 8848 barrels to Liverpool, 13,258 barrels to London, 6305 barrels to Glasgow, and 254 barrels various. The shipments for the same week last year were 15,149 barrels. The total shipments since the opening of the season have been 718,528 barrels



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write to W. C. CRONEMEYER, Agent, Carnegie Building, Pittsburgh, for illustrated book on roofing.

AMERICAN TIN PLATE COMPANY, New York.

against 1,256,018 barrels for the same time last year. The total shipments this season include 137,616 barrels from Boston, 133,221 barrels from New York, 81,450 barrels from Portland, 122,406 barrels from Montreal, 237,401 barrels from Halifax and 6395 barrels from St. John, N. B.

The following dispatch by cable on Monday says: "Steamers Sylvania, Roman and Numidian sell; sales 6000 barrels, market slightly firmer, fancy Baldwin \$4.32 to \$5.28, No. 2 Baldwin \$3.12 to \$3.84.

The exports from the port of Boston for the week ending Feb. 22, 1902, included 88,498 pounds of butter, 51,000 pounds of cheese, 42,000 pounds of oleo. In the same week last year the exports included 86,000 pounds of butter, 140,440 pounds of cheese and 102,200 pounds of oleo.

Tratton makes the exports from Atlantic and Gulf ports last week to include 215,200 barrels of flour, 1,467,000 bushels of wheat, 197,000 bushels of corn, 224 barrels of pork, 14,851 bushels of lard, 16,100 boxes of meats.

The total shipments of boots and shoes from Boston this week have been 83,927 cases, shipping 91,487 cases last week, corresponding period last year 84,675. The total shipments thus far in 1902 have been 730,379 cases, against 677,994 cases in 1901.

The live cattle exported from the United States in the calendar year 1901 amounted to 674,500 head, valued at \$3,606,204, against 423,151 head, valued at \$3,319,164, in the calendar year 1900.

The next thirty days is likely to see a greater car shortage in the Northwest, owing to the number of cars engaged for shipping Minnesota potatoes to the South and Southwest for seed purposes. Yet they have been Minnesota potatoes the best for their early crop.

Each day of the week is observed as Sunday by some nation. The first day of the week is our Christian Sunday; Monday is the sacred day of the Greeks; Tuesday is the holy day of the Persians; Wednesday, of the Assyrians; Thursday, of the Egyptians; Friday, of the Turks; and Saturday, of the Jews.

The ordinary active life of a locomotive averages fifteen years.

For the week ending Feb. 21, the exports from Boston were \$1,985,376, and imports were \$439,464; excess of exports \$1,545,922. Corresponding week last year exports were \$3,036,561, and imports were \$861,336. Excess of exports \$2,175,155. Since Jan. 1, exports have been \$14,806,426, and imports \$9,661,439. Excess of exports \$5,244,987. Corresponding period last year, exports were \$22,274,319, and imports \$8,428,609. Excess of exports \$13,845,710.

The mutton market is easy, with yields steady. Lambs 9 to 10 cents, fancy and Brightons 9 to 11 cents, yearlings 6 to 9 cents, muttons 7 to 9 cents, fancy 7 to 9 cents, yearlings 9 to 11 cents, fancy and Brightons 11 to 12 cents.

The visible supply of grain in the United States and Canada on Feb. 24 included 54,400,000 bushels of wheat, 10,789,000 bushels of corn, and 4,064,000 bushels of oats. Compared with a week previous this is a decrease of 1,006,000 bushels of wheat, 343,000 bushels of corn and 236,000 bushels of oats. Feb. 25, 1902, the supply was 57,536,000 bushels of wheat, 11,520,000 bushels of corn and 4,067,000 bushels of oats.

Eggs are lower again, Cape and nearby fancy bringing 29 to 30 cents, fancy Western and Eastern called as fresh Northern and Eastern called as fancy and Brightons 11 to 12 cents.

The live poultry market is steady, with yields steady. Lambs 9 to 10 cents, fancy and Brightons 9 to 11 cents, yearlings 6 to 9 cents, muttons 7 to 9 cents, fancy 7 to 9 cents, yearlings 9 to 11 cents, fancy and Brightons 11 to 12 cents.

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MASSACHUSETTS PLOUGHMAN
NEW ENGLAND AND
JOURNAL OF
AGRICULTURE

Who wouldn't be a part of Greater Boston?

The memory of Rebecca Salome Foster received well-deserved honor in Gotham.

The heyday of the blood is far from humble in the case of the latest elopement.

It certainly suggests general prosperity when a sneak thief goes about his business in a sleigh.

The Chinese reformers will never be happy until all those heads are delivered on the proper chargers.

When a Chinaman throws a flatiron, one is distinctly reminded of the fact that even the worm will turn.

A good man is good to his beast; therefore Dr. W. Seward Webb must be a particularly good man.

One would imagine that the carpenters down New York way would be particularly able to patch up a tree.

We were particularly touched by the salade Alice and the biscuits Henri. But why not a Deatches Brod Helmrich?

Another man has lived too lavishly. Many a social tombstone might be inscribed: "He lived not wisely but too well."

Polygamy is reported to be increasing—and this in the very hour of woman's declared ambition to look after herself.

A tin-plate president talking to hardware men is strikingly suggestive of an unyielding and coldly glittering commercial age.

We respect Miss Jewett, but we are glad that the Rev. Mr. Bisbee was only tempted to call her the Joan of Arc of America.

If the people want to vote on the laws, eventually they will. Meantime it looks as if the initial desire was becoming more general.

The lobster is in danger of losing a full inch off his legal length. The wisdom of not being a clam becomes less and less obvious.

Perhaps the climate is responsible for the cool editorial attitude taken by the Russian press toward the American reception of Prince Henry.

Boston is still Boston as long as she continues to number retired merchants among her citizens. The title breathes the atmosphere of the older regime.

According to the vital statistics one lonely man made a fifth marriage. Here is a man who knows his duty toward a surplus female population.

The pugnacious senators may well meditate upon the fact that though a man may get mad it is always unwise to lose control of his temper.

The no-license celebration in Revere was perhaps conducted as an object lesson showing that it is possible to have a real celebration in a no-license town.

The junior class at Tech did not vote to hold a "kommer," nor did they elect to specify a "smoker with beer." Why should they? What's in a name?

The brown-tail moth has got as far as Lynn. Probably the emigration might have extended to Salem save for the widely spreading fame of that city's chief executive.

Now it's the Unitarian Church that is having its attention called to the fact that multiplication is becoming sadly neglected in the arithmetic of fashionable Christianity.

Mrs. Stone is released and Mr. Blondin is caught. Here is encouragement for whoever gets impatient because the world doesn't seem to move fast enough to suit him.

Human nature would lead us to expect a sudden increase of illness out at Harvard, and a continuance of it until a majority of the undergraduates have tried their new infirmary.

Concerning the color line the Federation of Woman's Clubs seems to have made a compromise without knowing just how much they are compromised individually. Now for a test case.

The trees of Philadelphia suffered severely in the storm the other day, but it is more comforting to lose trees by a storm than to lose them by negligence, or, even more, by not investigating the possibility of negligence.

A Friend to the Cow. The Hon. T. J. Selby of Illinois favors the Grout oleomargarine bill and made the following speech in Congress in its favor:

Mr. Chairman—I desire to say a few words on this greasy subject. I am a friend to the cow. I am a friend to the woman that milks the cow. I am a friend to the man that stands by the cow, for is she not his helpmeet? I love to see the woman churn the foaming cream until the butter comes.

I love the nice fresh buttermilk, and love to see the busy housewife wallop the butter about in her hands into shapely rolls. I love to see the butter come, and then I love to make the butter fly.

Memory goes back to the happy times when the cows came home, and to the less happy times when I had to make them come home. Any man who has been raised with a cow will never lose his friendship for her.

HOOD FARM
Garget Cure

In garget the udder becomes inflamed, hot, red and painful, and the milk seems thick, stringy, bloody or watery. The following is a simple Hood Farm Garget Cure: Mix with damp feed two or three times a day will cure any ordinary case.

One of my cows had bloody garget and I fed her Hood Farm Garget Cure, night and morning for six days, after which the milk was all right." A. E. Loomis, North Woburn, Mass.

Price \$1 and \$2.50. Sent to any railroad express point in the United States, \$1.25 and \$2.75. Large holds four times dollar size.

Hood Farm Salve—especially prepared to be used in connection with our Garget Cure. Also excellent for cracked sores, sores, blisters, \$1.00. Hood Farm and its causes. Mention this paper.

C. I. HOOD CO., Lowell, Mass.

Having in mind a recent address to the Browning Club, we are pleased to say that we do not "feed wholly on white bread, and the tenderloin, and the sweetness and light

of the best people, and art for art's sake."

There are not many persons whose feet are legally declared worth \$30,000, but the small boy to whom a New York jury has recently decreed that sum for injuries sustained in a railroad collision will hardly find it full compensation.

By what arithmetic, may we ask, is it possible to compare the relative amount done for the United States by the good ship Constitution and Harvard College? The question has nothing to do with the fact that the frigate is worthy of all possible perpetuation.

Judging by the accounts Molly Pitcher is a very lively heroine. The author evidently meant to lead up to the cannon episode, and prove conclusively that Molly was just the kind of woman who would have done just that kind of thing.

The Watch and Ward Society is responsible for the statement that our friend, the policeman, works seven days in the week. Unfortunately, the same may be said of the criminal classes; but it ought to be possible to evolve a system under which the guardian of the peace should have a little more time to visit with his family.

Mr. Upham, speaking for the petitioners for the removal of bill boards in the vicinity of the parks, remarked that the bill boards distressed and yet attracted him. That is one of the best reasons for their removal, in view of the fact that many other persons find themselves in like condition when confronted by them. Bill-board advertising is often as painfully insistent as the refrain,

Punch, brothers, punch with care,
Punch in the presence of the passengair.

Art and the School.

We believe it was James Freeman Clarke who originated that description so admirably applicable to the women advocates of divers good causes: "She was always trying to fill a need that had first to be created." The characterization occurs to us, apropos of the recent discussion concerning the necessity and advisability of adorning our public schoolrooms with artistic photographs and plaster reproductions of the great masterpieces of painting and sculpture.

An observant critic has pointed out that to give healthy schoolboys and simple maidens the Rembrandt portraits, the friezes of the Parthenon and the ruins of the Roman Forum is like sending them to Shakspeare and Gibbon's "Decline and Fall" before they have had "Robinson Crusoe" and "Alice in Wonderland." The Old Master in general is an acquired taste, this writer with commendable frankness remarks, the last thing culture comes to appreciate and really love. It is cruelty to children to puzzle them with such things. It is dangerous to lead them to profess for them a shrewd respect they do not feel.

The only way in which the child can be so trained as to love ultimately the masterpieces in art is to develop his feeling for the beautiful and true in reproduction of nature by leading him gently along the lines of least resistance. The primary steps must be in things which are correlated to life as he knows it, pictures which, like that of "Can You Talk?" even a baby mind loves and comprehends, and others of the same nature and simplicity. Again, to expect the young child to care really at first for the armless Venus di Milo is analogous to demanding a recognition of the beauties of a Wagner opera from an intelligence scarcely up to Sousa.

And while on the subject of the Venus it might be said that there are many beside artistic reasons why our public schools should not be too generously decorated with beautiful plaster casts. In these days, when Prof. Sedgwick talks so vigorously about germs, and cleanliness is more than ever before held to be next to godliness, it is strange, indeed, that people have not protested at the casts as dirt-catchers. Nothing is more beautiful than a pure, white piece of plaster moulded into an artistic image, and few things are more ugly than that same plaster after it has lost its pristine purity. Now, in a public building, like any one of our Boston schools, the time that elapses between the coming of the bust, or statue, or relief and its last state,—so wholly worse than its first,—is, at best, a short one.

For dusting is little practiced in these buildings, and the consequence is that the child is often told to reverence as the supremest manifestation of the art-spirit a thing that is "all broken and horrid dirty, too," to quote a frank youngster's criticism. Art is all very well in its place, but we question whether its place is in the badly kept schoolrooms of Boston. A sense of eternal fitness should be a part of art, we hold. But if the children must have art in the schools, give them Perry pictures, that can be thrown away and replaced when soiled. Then send them to the Art Museum on Saturday there to look at the Venus, the Victoria, the Flying Mercury and the Parthenon Frieze.

A Friend to the Cow.

The Hon. T. J. Selby of Illinois favors the Grout oleomargarine bill and made the following speech in Congress in its favor:

Mr. Chairman—I desire to say a few words on this greasy subject. I am a friend to the cow. I am a friend to the woman that milks the cow. I am a friend to the man that stands by the cow, for is she not his helpmeet?

I love to see the woman churn the foaming cream until the butter comes. I love the nice fresh buttermilk, and love to see the busy housewife wallop the butter about in her hands into shapely rolls. I love to see the butter come, and then I love to make the butter fly.

Memory goes back to the happy times when the cows came home, and to the less happy times when I had to make them come home.

Any man who has been raised with a cow will never lose his friendship for her.

Skimmilk Calves.

Skimmilk calves can be raised at a greater proportion than nine-tenths of the farmers imagine, but most of them are not so raised. It is not a difference between theory and practice, but a difference between methods.

Fine skimmilk calves six months old frequently bring from \$15 to \$20 per head, and at that rate they are very profitable if the cost of raising them has been kept within reasonable limits.

There is some risk in the work until one has become expert at it. Then it is simple and sure. The calf must be taken from the mother early. Some do it when it is a few hours old, and it is fed by hand without knowing anything about sucking. Five quarts a day divided into three meals should be all that the calf should be fed at first, and this quantity is gradually increased up to about six quarts.

The largest meals should be given night and morning and half as much at noon. The milk should be as near the temperature of the milk from the cow as possible. All calf milk should be fed warm and sweet. Later sour milk can be fed, but that event it must be fed sour all the time. To change from sweet to sour will cause trouble. When two or three weeks old skimmilk can take the place of the sweet, full-cream milk, but the change should be made gradual. This is necessary because the quantity must be increased. It takes nearly twice as much skimmilk as cream milk to produce a pound of flesh or fat.

Notes from Washington, D. C.

Dr. L. O. Howard, the entomologist (bug) of the Department of Agriculture, one day last week entertained a delegation of Congressmen from Texas, who came to urge him to use all his efforts in an endeavor to have Congress make an appropriation of \$20,000 (as introduced in the House) for the destruction of the cottonboll weevil. This insect, it is stated, caused damage last year to the extent of over \$1,000,000.

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grower as much as possible, but our means

nor go back upon her, nor upon her back when adversity strikes her business.

The gentlemen from Virginia (Mr. Lamb) paid the Virginia cow a beautiful and eloquent tribute, but let me say to him that the Virginia cow cannot be compared with the big fat cows of the Mississippi Valley and beyond. I am well aware that Virginia is entitled to the proud distinction of having been the "mother of Presidents," but she was not the mother of the cow. The Mississippi Valley cow is a marvel of wonder and the pride of every home. She never goes dry. She is kind and gentle, and has such maternal affection that she often licks the milk instead of her calf.

If I fail to vote for this bill I shall feel that I cannot go home and ever again look an honest cow in the face. The cows in my country are Democratic cows. They give Democratic milk, which accounts for the everlasting big Democratic majorities in my district. They are not yet aware, sir, that there is such a thing as oleo in any part of their anatomy. Why, sir, even our hogs have not learned that their greasy inards contribute to the greedy work of building up a great anti-cow butter monopoly. If the peaceful hog knew it he would grunt in shame.

The cow in my country lives in Arcadian simplicity. She dwelleth amid green pastures, and looketh dubiously at the Republican politician as he passeth by on his mission to hoodoo the honest voter.

Frolicsome calves gallop about with tails erect, rejoicing in the fullness of democratic freedom that is theirs. The cow is contented and happy out in my district in her benevolent work of giving milk for young Democrats. Little does this patient cow know that the honest product of her toil is being counterfeited so successfully by cunning men that the butter eater knoweth not any more what he eateth when he buttereth his bread.

This "wholesome food product," called oleomargarine, you say is such a fine counterfeit of genuine butter, such a delicious substitute, that the honest son of toil cannot tell whether he is eating pure butter or this fraudulent compound of hog lard, steer fat and cottonseed grease.

Why should you not be as earnestly and eloquently advocating an honest thing for the honest workingman as you are earnestly and eloquently advocating this substitute, this compound of mysterious fats, for him? I tell you the honest son of toil is entitled to have the honest product of honest labor, the best and not the poorest, the genuine and not the counterfeit. We should take off our hats to these honest sons of toil, for we are here by their votes, by their kind permission. They expect us to prevent fraud, not to protect it. They expect us to give an honest vote for an honest measure. This bill is an honest measure to protect an honest industry.

Gentlemen, let us stand by the honest cow, and verily we shall have an abundance of genuine butter for our bread, and milk for our babies—and the earth and the fullness thereof shall be ours.

Improving the Grass Crop.

Most of our pasture and grass lands do not need thorough revolutionizing and replanting as much as a little encouragement. Many fields have nearly all the essentials of a fine pasture, but they lack just the necessary encouragement that the farmer fails to give them. There is first the pasture land that has been heavily cropped for two or more years, and is beginning to show signs of weakness. It has had the right start and has yielded heavily, but it now demands something more than the ordinary attention.

To prevent a complete failure of the next crop it would be wise to give that grass field a good dressing with something that will make the plants thrifty and active. A dressing of 150 pounds of nitrate of soda to the acre would encourage the plants to a new growth of great activity. Indeed, no field of grass can be continuously cropped for two or more seasons without needing some such dressing. The cost of the nitrate of soda will more than be compensated for in the extra yield of the crop.

A common practice to improve a pasture field of this character, or, in fact, any other that begins to show signs of weakness in places is to sow more seeds over it. Some try clover, thinking that the seeds will catch and enrich the whole crop and make it heavier. The fact is, that is waste of time and good material. The clover, or grass seeds, will hardly take root without plowing up the field, and is not desired. It is much better to enrich the soil so that the roots already established can do their best. If the seeds have been properly sown at the beginning there should be roots enough in the soil, and all that is needed is good soil and a little stimulation of the plants there.

In starting a field of grass or pasture land so much depends upon the way of preparing the soil and enriching it with the right manures and chemicals. Land rightly fertilized and thoroughly plowed and pulverized should make a crop of grass thrive so that the ordinary cropping will not injure the roots.

Close cropping by animals late in the season may cause trouble, because the roots are exposed to the frost and snow, and late cutting of grass or grazing of animals on it must be discouraged. We should have fall forage crops for feeding the animals in the autumn so the grass crop can be saved.

With a little care in this way, and an annual top-dressing the yield of grass could easily be kept up twice as long as ordinarily proves to be the case.

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When the change is complete the calves can be fed nearly all the skimmilk they will eat, but a little meal and ground grain can be added about this time to give them more strength and growth. At first put a little moistened meal in their mouths after drinking, and they will soon acquire a taste for grain. Within a week they will learn to take the meal themselves from the pall.

Four-week-old calves will eat nearly three-quarters of a pound of meal a day, and in eight weeks about double this amount. The feeding must be all done with care, and the food should be given after this in larger proportions.

Our Homes.

Baby's First Teeth.

As teething is one of the perfectly natural processes of development in the infant, it would seem that this growth should not be attended with any more disturbance than the growth and development of any other part of the body. There is no doubt, however, that many infants are more or less disturbed at the time of dentition, while not a few really suffer pain. It is a great mistake, though, to attribute all the pitty ills, every pain and disturbance, from the time the child is a few months old until he is two years old, to the coming of the teeth. A healthy child nursed at regular intervals by a perfectly healthy mother should not suffer with his teeth, unless the mother, as she sometimes does at the first sign of teething, thinks that it is necessary to provide the baby with an ivory ring, a new silver dollar, or some such hard substance to bite on; this is apt to harden and toughen the gum tissue and make it more difficult for the little teeth to force their way through.

The time when the first tooth should appear in the healthy nursing infant is from the sixth to the eighth month. For a bottle baby the time is usually a month or two later, and is sometimes delayed even to the tenth month. If the diet of the child has been principally patent foods, which are chiefly composed of sugars and starches, and have very little bone-making material in them, dentition is often delayed until the twelfth month or even later. The food has much to do with the discomfort of the child during teething, as upon its quality depends the child's nourishment, development, and consequently the strength to resist any drain made upon the system. The first teeth that make their appearance are the two middle lower ones, or, as they are called, the lower central incisors. There is then a rest of from two to possibly six weeks, when the four upper incisors come through; then another rest of one to three months, and the two lower lateral incisors with the four molars or small double teeth make their appearance. The next are the four canines, or stomach and eye teeth, which come two or three months after the molars. Lastly, after an interval of three or four months, come the four posterior molars, which are the last of the milk, or temporary, set of teeth. The last teeth are cut at about the twentieth or twenty-fourth month.

Usually two or three weeks before the teeth appear there is an increased flow of saliva, the infant drools considerably, and will often show signs of much thirst; he will take the breast or bottle eagerly, and carries his fingers or anything else he can grasp in his hand, to his mouth, and bites and chews on it. The gums begin to round out and lose the sharp appearance at the edges. The tooth, before it makes its appearance, is encased in a little sac. As the tooth grows and begins to push its way upward through the gum, it is according to the amount of resistance it meets that the process is more or less painful. If the gums are soft and offer little to retard the tooth's growth, the child suffers very little or none; if, on the other hand, the gums are tough and hard, as is often the case in early dentition, the tooth in its growth causes more or less pressure at the base, where the sensitive dental nerve lies. It is this pressure which causes the pain in teething children, and the accompanying fever and fretfulness.

That the child carries everything to its mouth and seems to take comfort in biting on things would go to show that the most sensible thing to do would be to give him something to bite on. This is quite right, but, as has been said, do not give the baby a hard substance, such as ivory or metal of any kind. Neither is it well to be continually rubbing the gums in hopes of helping the teeth through, as the continual biting on anything hard or rubbing the gums tends to make them tough, and therefore the cutting of the teeth more difficult and painful. Give the baby something to bite that offers less resistance—a soft rubber ring, for instance. If there were not danger of the thumb-sucking habit being formed, the baby's little fingers would serve the purpose very well. During the drooling period, especially if the excretion be somewhat excessive, it is well to place under the little bib a layer of oilcloth or thin rubber to prevent the dress and underclothing from becoming wet and lying damp and cold next to the chest. One of the most important things not to do at the time of teething is to overload the infant's stomach. Over-feeding plays a very important part in the many ills children are apt to suffer at this time, which are wrongly attributed to teething, but which rightly come from the stomach. As the symptoms of teething begin to show themselves, especially when the child evinces thirst and takes the breast or bottle eagerly, the young mother is apt to think these signs show hunger and the child needs an increase of food; on the contrary, where dentition is rather difficult, the child irritates, possibly more or less feverish, it is not advisable to add to these discomforts in the smallest degree, and there is probably no more simple or dangerous way to do this than to give the stomach extra work at this time. As there is much more danger from over-feeding than from under-feeding at this time, be sure to be on the safe side, and with these symptoms, namely, swollen gums, accompanied by restlessness or fever, no matter how slight, reduce the baby's diet for a day or two, by either giving less in quantity or making the food weaker. Thirst may be relieved by giving water old-fashioned and in small quantities. The old-fashioned habit of giving a bit of ice wrapped in a piece of flannel is not a good one, as the ice is too hard a substance for the gums to come in contact with and the water obtained from it is not pure. The child usually has more trouble with the last teeth which are cut than with the early ones. As at this age the child is usually having a heartier and more varied diet, a little care must be exercised in feeding. It will often be necessary to stop everything in the way of cereals, thick gruels, or heartier food, etc., and for a short time limit the nourishment to diluted milk and broths. Fever, rashes, extreme restlessness, convulsions—any such disturbance during the first two years of life is more often due to stomach and intestinal disorders than to the mere process of teething. Careful attention to diet during this period of the child's life controls most of the ills attributed to dentition.

The period when dentition is most likely to be painful is when the teeth first begin to grow in the little sacs which encase them. It is at this time, if at any, that the child suffers, especially a child whose teeth are late in coming, and whose gums have therefore become hardened. It is sometimes, in cases like this, advisable to lance the gums, but the cut should be made deep enough to pierce the sac which

contains the tooth. This process does not mean, as many think, that the tooth will come through within a few days, for this is not the case; it may still be two or three weeks before the tooth makes its appearance; but it does mean that its growth is made easier, the tooth finding it much easier to force its way through a sac, which is much more tender than the original tissue. When the tooth is seen under only a thin layer of gum, all discomfort is over so far as that tooth is concerned.

It is a mistake to think that the child's first set of teeth need little or no attention, and that nature will care for them. As a matter of fact, from the moment the first little teeth make their appearance the care of the teeth should commence. The strength of the second or permanent teeth depends largely on the good and sound condition of the first. As the decay of the teeth always commences from the outside, the first care is the mouth. It should be kept clean and none of the germs which cause decay be allowed to remain there. Acid is one of the first causes of decay in the early teeth, and the cause of acid in the mouth is often that after each meal a small portion of the milk is allowed to remain in the mouth, where the warm temperature causes fermentation. In a small baby, the mouth should be washed with water containing a pinch of borax or boric-acid solution after every meal, and at least two or three times a day in an older child. A soft bit of linen or a little absorbent cotton wrapped around the finger is sufficient for this process. When the child's double teeth come, a soft toothbrush should be used. Be sure to use the brush gently, employing the horizontal motion and the perpendicular as well, as by doing this the bristles of the brush get between the teeth and dislodge little particles of food which cling there. The mouth also should be opened wide, and the crown of the teeth well brushed. After the teeth are washed, the mouth should be thoroughly rinsed. It is not necessary to use soaps or tooth pastes or powders. Plain boiled water, or water with a pinch of borax, or a saturated solution of boric-acid wash, the last being mildly antiseptic, can be used. Either one of these is sufficient to keep the child's mouth clean and healthy under ordinary circumstances.—*Harper's Bazaar.*

The Table's Linen.

It seems after all that the habit which abounds among housekeepers of the wise and thrifty sort, of taking account of the stock of table linen with a view to replenishing it, and of adding at the same time all the new and desirable effects in it that manufacturers have brought into being for their use and appreciation, is founded on an old custom. For in old times there was a woman's festivity jestingly known as "St. Distaff's Day," and it began the first working day after the Christmas holiday. Distaffs were brought out again, and the work of spinning went on as before the interruption.

It was in New York that the first linen "sales" were inaugurated by one whose name will ever stand at the top in the history of the dry goods business in this country. Quickly the large stores in his own city and in others followed suit, and now the first two months in the year are those in which selections are made for all the details that come under the head of "table linen." As every woman knows that in table linen "the best is the cheapest," there is no need to give advice here as to the kind to be chosen. Rather it is the privilege of the present writer to contribute to the subject just a few hints not known to every housekeeper for the safe keeping and storing of table linen. To begin the laundry and work up, it is taking a risk always to have the damask cloths dried out of doors in freezing weather. The heavier they are the more apt they are to crack if frozen, and to dry them in the house is therefore the more judicious way. But if necessity compels an out-of-doors drying then it should be seen to that the damask is not folded while frozen. Much harm may be avoided by an observance of this precaution.

Also the very best damask may take a notion to crack some day if it is laid too often over a sharp-edged table. But this rarely occurs now, when so many housekeepers use the blanketing under the cloth. Careful housekeepers never did have a tablecloth or napkin hemmed on the machine, and even those who have in the past been led into making this mistake, have seen the error of their ways, or soon will. In hemstitching, it is customary to give the tablecloth a two-inch hem, and the napkins half as wide, though sometimes the hem is even wider.

The best way of marking table linen is usually in the corner, and it may or may not be an improvement to the cloth. Much depends on how the marking is done. In the first place, monograms on a figured damask are apt to look blotchy, and unless one has the key to the situation, are quite undecipherable. Initials, not too fanciful, are in better taste from every standpoint.

Probably, next to the breakage of cut glass, the old-world misfortune vexes the heart of the mistress as does a permanently stained tablecloth. Stains will come to it; it would be an impossibility to avoid them, but, taken in time, they may be eradicated completely and satisfactorily. But this process of eradication must be undertaken before the cloth is washed at all, otherwise the stain becomes indelible.

Ordinarily fruit stains may be removed by pouring boiling water through them. It must actually be boiling, and really two persons should undertake the removal of the stain. One should hold the cloth out rather smoothly over a basin, and the other should pour slowly a pot of boiling water over and through the stained part. Tea and coffee stains may usually be got rid of by just this use of boiling water.

But if spots from the foregoing causes remain obtrusive, or if by accident the cloth has been washed before the stains were noticed, then try dissolving four ounces each of chloride of lime and washing soda in three quarts of boiling water. Pour this through the stain very slowly, and then rinse faithfully with boiling water, clear.

Iron rust may be removed by putting salt on the stains, squeezing lemon juice over it, and leaving in the sun. Sometimes one application will effect the disappearance of the stain, but not infrequently two or even three treatments are necessary.

Some vegetables leave stains, and if one of the foregoing prescriptions fails to rid the cloth of them, try the others; then if all of these fail try wetting the stain, and holding under it the fumes of a burning sulphur match. Hold it there as long as any sulphur remains on it, and then strike another and another, till the good work is complete.

It is a troublesome nuisance, once it gets spilled on table linen, but when the offense is fresh plenty of soaking in sour milk will, at a rule, make the cloth as white as ever.

If by any chance a hot iron scorches the cloth a bit, lay it in the sun for three or four

hours, and unless the burn has gone too deep the wrong will be righted in the next washing of the whole cloth.

For the removing of wine stains of any kind, probably no plan is so efficacious as that of washing the stain, or wetting it, rather, with a strong soda made of hard, yellow laundry soap. After this, coat the stain very thickly with pulverized starch and lay it in the sun. After one good sun bath of two hours or so, the stain should disappear; still, if it does remain, do not be discouraged, but begin all over again, wetting it with the soda and giving it fresh starch.

Nothing removes paint from a tablecloth more happily than does turpentine, and you couldn't desire anything to do it better. Almost as by a miracle it disappears. Wet a cloth well with the turpentine and keep it wet, rubbing the stain with it steadily. Varnish, of course, yields to the turpentine treatment as readily as does paint.

It is understood that any and all of these "removers" need to be applied as soon after stain makes its mark as is possible.

Delay, while not proving fatal, does in all cases retard the prompt and satisfactory working of the eraser.—*The Epicure.*

Secret of a Long Life.

You sometimes see a woman whose old age is as exquisite as was the perfect bloom of her youth, says the *Pittsburg Dispatch*. You wonder how this has come about. You wonder how it is that her life has been a long and happy one. Here are some of the reasons:

She knew how to forget disagreeable things.

She kept her nerves well in hand, and inflicted them on no one.

She mastered the art of saying pleasant things.

She did not expect too much from her friends.

She made whatever work that came to her congenial.

She retained her illusions, and did not believe all the world wicked and unkind.

She relieved the miserable and sympathized with the sorrowful.

She never forgot that kind words and a smile cost nothing, but are priceless treasures to the discouraged.

She did unto others as she would be done by, and now that old age has come to her, and there is a halo of white hair about her head, she is loved and considered. This is the secret of a long life and a happy one.

Domestic Hints.

ROLLED SWEDISH POTATOES.

Scrub the potatoes clean with a vegetable brush and put them over rapidly boiling salted water. Cook until they can be pierced with a fork and are only slightly hard in the centre, then drain off the water. Put the kettle on the back of the fire, cover the potatoes with a napkin, and over this put the cover of the saucepan to hold in the steam. Let the potatoes remain for fifteen minutes where the heat is sufficient to keep them steaming without burning, then serve.

RISQUE OF CRAB.

Ingredients: One scant pint of crab meat, one quart of milk, two tablespoonsfuls of rice, one cup of cream, salt and pepper to season, and croissants to serve in each portion. Pound the crab meat in a mortar until fine, and put it with the milk and seasoning in a double boiler to cook for one hour, after which pour the mixture through a fine colander, rung through the thick portion. Put it in the double boiler again, add one cup of cream, heat, and serve with croissants made by drying small squares of toast in the oven until brown, and dip them in melted butter.

HARV. MOUSSE.

Soak a level tablespoonful of granulated gelatin in a fourth of a cup of cold water, dissolve it in a cup of milk, add a few drops of rice, add a white stock; beat the yolks of three eggs, add to them one cupful of milk; pour this upon one and one-half cupfuls of sifted flour and mashed potatoes; add the beaten whites of the eggs and two level teaspoonsfuls of baking powder. Fill buttered pan two-thirds full, and bake in a quick oven twenty minutes or half an hour. Do not brown them too much.

MACARONI CREAMED.

Break twelve sticks of macaroni into one-inch lengths and boil in one quart salted water twenty minutes. Turn into a colander and drain. Make a cream of one tablespoon each of butter and flour rubbed smooth and added to one and a half cups of hot milk. When thickened, season and return to the pan. Pour into a mold, add cream and heat, and serve with a spoonful of mayonnaise on each slice, and garnish the centre with an olive or a round of sliced pickle. Serve as a salad course with water or sandwiches.

POTATO GEMS.

To one cupful of warm mashed potatoes add one tablespoonful of butter, one teaspoonful of salt; beat the yolks of three eggs, add to them one cupful of milk; pour this upon one and one-half cupfuls of sifted flour and mashed potatoes; add the beaten whites of the eggs and two level teaspoonsfuls of baking powder. Fill buttered pan two-thirds full, and bake in a quick oven twenty minutes or half an hour. Do not brown them too much.

SNOW PUDDING.

Dissolve half a box of gelatin in one pint cold water; when soft add one pint boiling water, the juice and grated rind of two lemons, and two and one-half cups of sugar. Pour into a mold, and when set, turn out. Then whip the cream and add to the mold, and when set, turn out. Put into a mold, and place on ice. Serve with soft cream made of one pint milk, yolks of three eggs and half a cup sugar. Flavor with vanilla.

Fashion Notes.

* * * The woman of fashion wears a smart little fob to guard the watch slipped in the belt of her tailor-made gown. This fob is a few inches long, made of wide silk braid or perhaps gros grain ribbon, and is fastened with a tiny bearing and a ribbon.

* * * A new spring coat that lends a trim look to slender figures comes from Paris and closes at the left side. It can be found to harmonize with any costume.

* * * The butterfly comb is the latest idea for decorating a high comb. It is formed of the finest carved shell, and affixed to the hairpin or comb by a brass hinge or tiny spring, the latter lending a fluttering motion to the butterfly whenever the head is moved.

* * * Soft chiffon pompons are also popular for hair decorations, and can be in any color. There are a few ornaments of pearls, and the edge tipped with the tiniest spangles or pearls.

* * * Color bouquets of artificial violets are the fashion for competing with white or black evening costumes. The bunches are medium sized, and from the stems hang numerous short streamers each having a tiny bow or pompon on the end.

* * * The majority of belts for spring wear have a wide effect in the back and buckles formed to wear with the dip from waists.

* * * Another design for a spring belt has an ornament at the back, joined to the belt by bars and links. A belt with a cameo, set in a delicate outline background of gold, is adapted for wear with light colors.

* * * In many of the spring suits the black and white effect which has come to be known as "mournful" is observed. This tendency is also displayed in the spring coats and outer garments.

* * * Mincing was a fad in the last century.

The World Beautiful.

Lillian Whiting, in *Boston Budget*.

"I am capable that you have not any business in life except the growing of a human soul; I do not say that is the chief business; I say that is the *only* business. Getting a living is incidental; being decently clad is incidental; gathering the household about you is incidental; pursuing a some line of business enterprise is incidental, but the only thing essential with which you have to do is to do the best you can. From first to last, through a long lifetime, you have been steadily accumulating power in the centre of being. That is the only business, and the man who does not realize that has simply placed his emphasis in the wrong place in life. Think of it! What does it mean, this extreme statement that I have made? I am only sketching out a subject which I want you to develop in your own thinking, but I submit for your consideration two or three suggestions, which, as I hold, guarantee the importance of the statement. You have no business in the world except the growing of a human soul. That is all."

—Rev. Dr. Thomas R. Sibley, minister of the Church of All Souls, New York.

Easy Harness

All harness, old or new, is made pliable and easy—will look better and wear longer—by the use of Eureka Harness Oil.

The finest preservative for leather ever discovered. Saves many times the cost of appearance, and in the cost of repair. Sold everywhere in various sizes, and in the cost of repair. Made by STANDARD OIL CO.

been occupied for several years, it may not be easy to find other tenants who will pay as well. We remember reading not long since of a man who made use of an old house by placing beehives in it, with holes cut opposite each hive, which were as many as he could find room for against the walls all around, and there they were summered and wintered in good condition.

We have had less to say about bees lately than usual, because the best care that can be given them during January and February is to let them alone. Do not let the hives be drifted over with snow for any long time. It is too warm a covering, and the bees consume their stores, cannot get out, and die of diarrhoea or starvation. But the drifts that may blow over them during a storm do no harm, but rather good by keeping out the cold winds. The worst effect of snow is when it drifts over them, gets wet and freezes. This excludes the air and they smother. In all such cases break the crust as soon as seen and clear the snow away from the entrance. But no feeding should be done at this season, and we would not open a hive unless we were very sure that mice had begun to work in it. In that case expel the intruders and cover the hive more closely than before, as the bees cannot seal it up well in the winter.

The Ontario Beekeepers Association exhibited from three thousand to four thousand pounds of honey in comb and extracted in glass jars at the Pan-American Exhibition last year. They also exhibited at the Colonial Exhibition in London, England, and in Glasgow, Scotland. Wax and wax foundations were also shown. The honey was produced from Alsike clover, white clover and linden blossoms, and was mostly produced in June and July. These exhibits have proved most excellent advertisements for Canadian honey, and there is a good demand for it in England, and the duty of 13 cents a pound does not prevent considerable quantities being imported into the United States.

This association has done much for the beekeeping interest in Canada, not only holding meetings for instructing those who attend them as to the best way of caring



Miscellaneous.

A Sheet of Gray Note Paper.

"Bess!"
"Don't call me 'Bess,' my name is Elizabeth; and, considering the publicity of our surroundings, I think it would be more dignified, not to say respectful, for you to address me as Miss Richards."

"Well, I never!" ejaculated Mr. Vernon, as he seated himself at the table and surveyed the small, slate person, who was viciously banging the typewriter. "You'll smash your machine, Bessie—ahem! Miss Richards—if you keep that up."

The young woman stopped, folded her hands and bestowed on Mr. Vernon a withering glance from a pair of sapphire blue eyes.

"Can't you see I'm busy?" she demanded ominously. "You've been here once before today. What do you want?"

"To talk with you," replied Mr. Vernon, imperturbably.

"One would think I was here for the sole purpose of entertaining you," Miss Richards retorted caustically. "I've had to settle two extremely big men already this morning. I beg you not to make the third."

"What do they say to you?" inquired her visitor, in a tone which boded no good for them were they in his vicinity.

"Oh," wistfully, "one dictated two letters, and on the strength of it asked me to go out driving with him; the other desired my company at luncheon."

"The scoundrels!" growled Mr. Vernon savagely. "Give it up, Bess, and marry me."

"I don't know why it is," continued Miss Richards, declining to take any notes of his offer, "but nine men out of ten, if they bring me one dollar's worth of work, think they may stay and bore me for an hour. The tenth always imagines I'm hungry or plining for a date."

"I really think this play will net you at least twenty dollars," interrupted Mr. Vernon in a blotted of muckraking mischief, taking a roll of manuscript from his pocket and referring to your statement, Bess. I'm liable to bore you for twenty hours. Still, if you prefer the drive or—

"Let me see it!" cried Elizabeth eagerly. "Oh, Dave, is it your new play?"

"Yes," replied Mr. Vernon, handing her the manuscript, "but I really wish, my dear girl, you would be more respectful when you address me. My name is David, and, in a public place like this—" with a comprehensive glance around the room, which contained only himself and Miss Richards—"I really think it would be more dignified for you to say Mr. Vernon."

"Oh, bother!" retorted Elizabeth, making a naughtily face. After which express return she plunged into the manuscript and became utterly oblivious to Mr. Vernon's presence.

They had met twice before at Cornell. It was Elizabeth's first year, and David's last. He had a sister, who was in her class, and the two girls became very intimate. Naturally the brother came in for his share of attention, and, as naturally, he fell a victim to the charms of his sister's friend.

A half hour later David was standing on Mrs. Richards' steps. The door was unlocked and he went in. He feared Bess might send word she was not at home, but he rang the bell.

"They are away," he said unhesitatingly. "Let us hope he will take it, then," said Dave, handing him the manuscript. As he did so, the little sheet of gray paper fluttered to the floor.

Charlie picked it up. "Where on earth did this come from?" he demanded in astonishment.

"I've been asking myself the same question for the last ten minutes," replied Dave, laughing. "Some person or persons unknown put it between the leaves of my play."

The playful look on Charlie Thurston's face gave way to a smile. "I had it on my desk the night I sat up reading your confounded stuff, and it must have slipped in somehow. By the way, old man," he added after a little pause, "you must congratulate me. Ruth and I are to be married next month."

"Miss Gilmore?" asked Dave in a surprised tone. "So her name is Ruth, is it? Well, Charlie, here's my hand. You always were a lucky fellow."

Before the close of the year Elizabeth had to resign all thoughts of a college education. The death of her father and the condition of his affairs made it necessary for her to assume the support of her mother and little brother. She had made herself proficient in stenography before entering Cornell, and, for a time, had acted as her father's secretary. On her return home she devoted six weeks to "getting up her speed," and then opened an office in a newspaper building on F street.

David Vernon leaped up once more in his enthusiasm, a year after she began her stenographic career. His uncle was a well-known Washington lawyer, and he offered to take David into the firm as junior partner. The young man would have preferred a literary career, but the opening was such a good one that he accepted it. It also had the advantage of bringing him nearer to Elizabeth. He devoted his evenings to the study of literature, however, and already had made him the author of several charming little comedies.

When he learned what Elizabeth was doing, and his hand she had to work, David, with fine prospects but small salary, asked her to marry him and Elizabeth laughed.

"I'll spoil your career, Dave," she said, "and if that is not a good reason—" with a glance of amusement—"I have a better."

"What is it?" demanded Mr. Vernon.

"I don't like people creeping in on me unawares," replied Miss Richards crossly.

"Then people shouldn't refuse to see their friends," Dave retorted coolly.

There was an awkward silence. David finally got up and pushed his chair nearer Elizabeth's lounge. "Goodwin has agreed to examine my play," he remarked. "Charlie Thurston—your uncle—asked him to do it. Thurston sat up all night, and he says he's certain Goodwin will take it."

"I am sure I hope you will be successful," was Miss Richards' polite rejoinder.

David eyed her mischievously. "By the way, Bess, did you ever meet Ruth Gilmore?" he inquired innocently.

Elizabeth sprang to her feet. "Oh, it is you, David!" she said ungraciously.

"Yes, it is," retorted Mr. Vernon forebodingly.

"I don't like you," said Miss Richards crossly.

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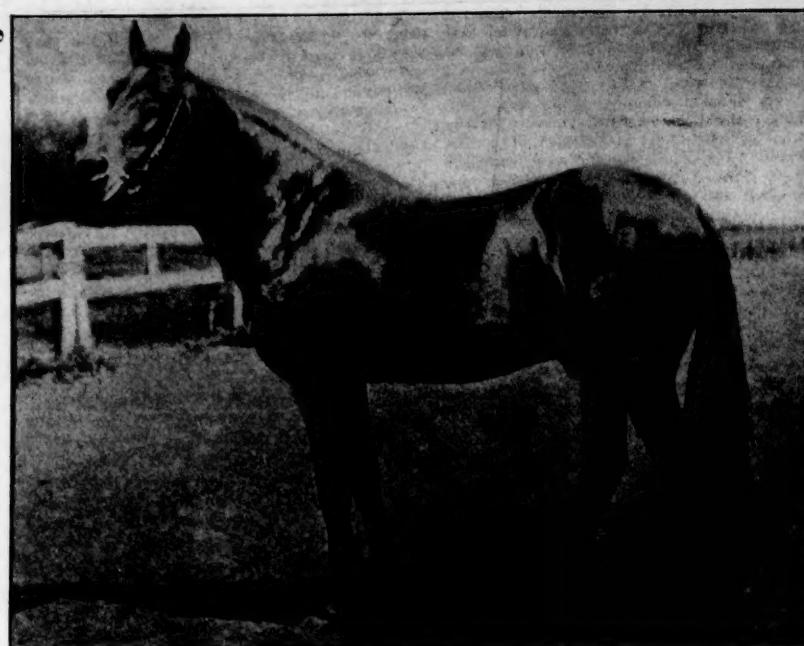
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THE NOTED CALIFORNIA SIRE, GUY WILKES, 2.15 1-4.

The Horse.

Guy Wilkes (2.15 1-4).

Guy Wilkes, whose likeness above was reproduced from a life photograph, was a dark bay stallion, about 15.3 hands high. He had a brainy, sensible head and an expression of countenance that to an experienced horseman, was indicative of both courage and a large amount of horse sense. His barrel was deep, back short and strong, hips smoothly turned, his quarters heavily muscled, and his hind legs noticeably straight. Taken all in all he was a grand model of a trotting stallion.

He was bred by William Dunn of Cincinnati, O., and foaled in 1879. His sire was George Wilkes (2.22). His dam was Lady Bunker, by Herr's Mambrino Patchen. Lady Bunker is also the dam of El Mahd (2.25), and produced four sons that have sired stallions.

The second dam of Guy Wilkes was Lady Dunn, by Seely's American Star, and she also produced the trotter Joe Bunker (2.19). The latter was got by George Wilkes. The third dam of Guy Wilkes was known as the Capt. Roberts mare. She enjoyed the reputation of being the fastest trotter to be found in the section where she was owned, but her pedigree was never made public.

Guy Wilkes was bought before reaching maturity by the late William Corbitt, and taken to his San Mateo trotting breeding establishment, near San Francisco, Cal. Mr. Corbitt was so fortunate as to secure the services of that very capable and industrious reinsman, John Goldsmith, a born horseman who had received an excellent schooling. Mr. Corbitt bought Guy Wilkes for stock purposes and kept him in the stud for a while every season that he owned the horse. Goldsmith developed his speed, however, and began racing the horse in 1884 when five years old. His first race was at San Francisco, Cal., Aug. 6, 1884. The first heat was won by Blanche in 2.25, but Guy Wilkes took the next three in 2.24, 2.24, 2.21. He started in nine races that season and won first money in all of them, taking but two heats in the nine races. He closed the season with a record of 2.19 made in the last heat of the last race that he trotted that year.

After making a season in the stud in 1885 Guy Wilkes was raced again. He was in better company than year than in 1884, and won first money in but three races out of the eight in which he started. Arab (2.15) beat him twice, but he beat Arab once, and made him trot two consecutive heats in 2.17 to win in the last race of that season. Nelly A. (2.17) beat Guy Wilkes three times early in the season, but he defeated her in the last race that they met, although she got the first heat of it in 2.17. He lowered his record that season to 2.18.

After making a season in the stud again in 1886, Guy Wilkes was fitted for campaigning, and began racing at Santa Rosa, Aug. 21. In this race he met Adair and Anteet. Adair won the first heat in 2.20, but Guy Wilkes took the next three in 2.22, 2.19, 2.15. He started eight times that season, and won seven first money. The horse that defeated him was Harry Wilkes (2.13). He was not raced in 1887, and was started but twice in 1888. He defeated Stamboul (2.07) and Woodnut (2.16) at Oakland, Cal., Aug. 27, 1888, in a five heat race, and two weeks later was beaten by Woodnut in another five heat race at Sacramento, Cal., Sept. 8, 1888. He was never started after the defeat by Woodnut.

During a visit to California in the winter of 1886 or 1887, trainer James Golden saw Guy Wilkes and liked him so well that after reaching home he decided to buy the horse if he could do so at a reasonable price. Mr. Golden attended the Goldsmith sale of trotting stock in New York in 1887 for the purpose of interviewing trainer John Goldsmith, and learning if it were probable that Mr. Corbitt would sell Guy Wilkes for \$30,000. Mr. Goldsmith informed him that \$40,000 would not tempt Mr. Corbitt to part with the horse, and also stated that he (Goldsmith) considered him the greatest trotting stallion living.

After Mr. Corbitt's death the San Mateo horses were brought East and disposed of at public sale. This was in February, 1897. Mr. W. J. White, proprietor of Two-Minute Stock Farm, Cleveland, O., bought Guy Wilkes for \$3000. Hon. F. C. Sayles of Pawtucket, R. I., was the contending bidder and bought Sable Wilkes (3) (2.18) at that sale for \$1900. Guy Wilkes was kept at Two Minute Stock Farm until his death, which occurred about the middle of September, 1900.

The total number of the get of Guy Wilkes that have made records of 2.30 or better is seventy-six, and sixty-six of them are trotters. Three trotters and two pacers by him entered the list last season. There are nineteen of his get in the 2.15 list, and four of them are credited with records below 2.10, viz., Fred Kohl (2.07), Hulda (2.08), Seymour Wilkes (2.08) and Less Wilkes (2.09). The others that have made records better than 2.12 are Dollie Wilkes (2.10), Mute Wilkes (2.11), Rupee (2.11), Hazel Wilkes (2.11), Alannah (2.11) and Regal Wilkes (2.11). Our books show that twenty-eight of the sons of Guy Wilkes have already sired 2.30 speed, and his daughters have produced twenty-five standard performers, twenty-three of which are trotters. His daughters have also produced six stallions that have already sired 2.30 speed. The likeness from which that represented on our first page was reproduced originally appeared in the *Sunset Magazine*.

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